HYGIENE AND PUBLIC HEALTH

UNDER THE CHARGE OF
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Mortality Statistics of Wage Earners and their Families.—DUBLIN and KOPF in a recent book published by the Metropolitan Life Insurance Company, under the title "Mortality Statistics of Insured Wage Earners and Their Families" touches a field which, up to this time, has received too little attention from those interested in preventive medicine and public health. Since 1900, there have been available the annual mortality reports of the United States Census Bureau. These relate to the general population. The volume just published by the insurance company, however, relates to the mortality of its industrial policyholders. This means that the death-rates are those of wage-earners and their families residing almost entirely in urban communities. No such data are available from any other source. Since the compilation is made along the same basic lines as those by the Census Bureau, public health and social workers, sanitarians and others have now, for the first time, an opportunity to compare health conditions in the general population with those of the wage-earning group. Six years (1911 to 1916 inclusive) are covered in this book. During that period, there were more than 635,000 deaths, and about fifty million years of life are represented. The significance of this is that with the immense number of lives at risk, in almost all of the States of the Country and the provinces of Canada, there is certainty that the figures are representative figures. A large number of tables appear showing deaths and death-rates by color, sex and age for all of the more important diseases and conditions. Others show the trend of the mortality for each important cause of death throughout the six-year period. It is shown that for all age groups under twenty-five years, there is no marked divergence in the mortality of wage earners and of the general population. After age twenty-five, the mortality of male wage earners is markedly in excess of that for males of corresponding ages of the general population. With females, the experience is very similar, although the excesses in the wage-earning groups do not begin to manifest themselves until the age of thirty-five is reached. Various factors are responsible for the higher death-rates of the industrial group. Among them, may be noted the comparatively larger number engaged in arduous labor and hazardous occupations, the care of larger families with smaller incomes, together with lower standards of diet, housing, clothing and medical service. Then too, there is the very important fact that the Industrial policy holders constitute practically an urban group, whereas only one-half of the general population live in the cities. The death-rate of the colored policy holders is over 50 per cent. in excess of the whites. This condition obtains for both males and females. In some age groups and for certain causes of death, the situation is even more unfavorable. Thus, for tuberculosis of the lungs, colored males under age fifteen showed death-rates about ten times as high as white males at the same ages and, colored females, between eight and nine times as high as white females. The more important diseases are discussed in special chapters. Notable among these are tuberculosis, organic diseases of the heart, pneumonia, Bright's disease, cancer and others. For each disease, interesting and valuable comparisons are made showing the differences in the mortality experience of the general population and the wage earners. Among the diseases in which a marked downward trend in mortality was observed, are typhoid fever, scarlet fever, diphtheria and tuberculosis. The mortality from diabetes showed a tendency to increase. There were no important changes in the death-rate among the industrial classes for cancer, organic heart diseases, cerebral hemorrhage, Bright's disease, causes incidental to pregnancy and childbirth, suicides and accidental deaths. Qualified workers may obtain this volume by writing to the Company.

Pollution of Certain Tidal Waters of New Jersey, New York, and Delaware, with Special Reference to Bathing Beaches and Shell-fish Bearing Areas.—CUMMING'S (*Public Health Bulletin No.* 86, U. S. Public Health Service, August, 1919) studies cover a large amount of field and laboratory work in some of the most populous and important coastal areas in the United States. The chief points in his summary are as follows: As a result of the laboratory examination and sanitary surveys made by the service, it has been determined that the waters in which these shellfish are grown are, with the exception of the small areas described, free from pollution. However, almost all of the oysters grown in these waters are removed to small creeks or rivers, where the salinity of the water is less, for the purpose of "floating" or "freshening" before shipment. The sanitary condition of such oysters depends upon the condition of these creeks rather than that of the beds on which they are grown, and some of these "drinking" places have been found to be unsatisfactory. Throughout the State the New Jersey Department of Health has been found to have been active in attempting to remedy dangerous conditions wherever they exist, and it is believed that this organization as at present constituted will do even more efficient work in the future. In addition to the great value of the coastal waters of New Jersey in connection with the shellfish industry, these waters are of far greater value because of the number of summer resorts along the whole shore from Sandy Hook to Cape May. The protection of these waters from pollution and nuisance is therefore of the utmost importance to the State, and because shellfish are shipped from the State throughout the country, and the resorts are visited annually by hundreds of thousands of citizens of other States, the sanitary conditions of the resorts and of the coastal waters is a matter of national moment. People who go to such resorts are gradually being educated by the various public health agencies as to the possible danger of contracting diseases in insanitary surroundings, and are beginning to consider the healthfulness of a resort as an important factor in determining where they shall spend their vacation. As a result the citizens of the resorts are beginning to realize the monetary value of good sanitary measures, and there seems to be a general appreciation of the necessity for maintaining good sanitary conditions in the communities along the coast. One source of considerable danger exists nearly everywhere along the inland waterways in the vicinity of communities or cottages with sewerage systems. Bulstrode and others have called attention to this danger in England. It seems to be a common custom for cottagers, boarders, and "trippers" to dig clams, for pleasure or profit, without reference to the proximity of sewer outfalls. Indeed, such places often seem on account of their convenient location to be favorite localities with such people. This problem would appear to be one for local sanitary police regulation, although it is of general interest because of the fact that these people come from all sections of the country. The use of large warning posters such as are displayed near Atlantic City is to be commended.

Deer-fly Fever, or Pahvant Valley Plague.—FRANCIS (*Public Health Reports*, 1919, xxxiv, 2061) reports the occurrence in Utah of a disease characterized by septic fever and enlargement of regional lymph glands. The disease is popularly believed to be due to the bite of the deer-fly. Suitable animal experiments demonstrated that the disease is due to B. tularense, which has been found to be the cause of a plague-like disease of rodents.

Pitfalls in Determining the Prophylactic or Curative Value of Bacterial Vaccines.—McCOY (*Public Health Reports*, 1919, xxxiv, 1193) calls attention to the difficulties attending the determination of the value of prophylactic agents in influenza. The commonest error is made by beginning the vaccinations after the disease has appeared in a group of persons. Those who developed the disease prior to the vaccinations are carried in the control group, while the vaccinated are the relatively immune part of the population, many of whom would not develop the disease in any event. A second source of error lies in crediting to the vaccinations the absence of the disease in a group all of whose members have been vaccinated, while in reality the protection may be due to quarantine or other circumstances. Finally, warning is given of the danger of drawing conclusions from meager data. It is insisted that only a portion of any group should be vaccinated, the remainder, comparable as to age, sex and conditions of exposure, being regarded as controls. It is pointed out that an efficient agent might fail because time has not been allowed for the immunity to develop.

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